

The Honorable Benjamin H. Settle

**UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT TACOMA**

DREW MACEWEN, *et al.*,

Plaintiff,

v.

GOVERNOR JAY INSLEE, in his
official capacity as the Governor of
Washington,

Defendant.

NO. 3:20-cv-05423-BHS

DECLARATION OF KATHY LOFY, MD

I, Kathy Lofy, MD, declare as follows:

1. I am over the age of 18, competent to testify as to the matters herein, and make this declaration based on my personal knowledge. I am currently employed as State Health Officer and Chief Science Officer at the Washington State Department of Health (DOH), a position I have held for six years.

2. I am responsible for advising the Secretary of Health and the Governor on public health issues, including health promotion, disease prevention, and emergency response, including the response to the COVID-19 pandemic. I earned a BA in human biology from Stanford University and an MD from the UCLA School of Medicine and completed a pediatric residency at Children's Hospital Oakland. I started my public health career in 2002 as a U.S. Centers for Disease Control and Prevention (CDC) Epidemic Intelligence Service Officer

1 assigned to DOH. I then joined DOH. Prior to attaining my current position, I served as the state
2 foodborne disease epidemiologist, influenza surveillance coordinator, and medical consultant to
3 the Offices of Communicable Disease Epidemiology and Infectious Disease.

4 3. On January 8, 2020, I received an advisory from the CDC regarding an outbreak
5 of pneumonia of unknown etiology in Wuhan, China. This cluster of pneumonia was
6 subsequently determined to be the start of the COVID-19 pandemic. Since early January, in
7 collaboration with state and local public health experts, I have helped lead Washington State's
8 response to the COVID-19 pandemic by developing, implementing, and advising the Secretary
9 of Health and Governor on public health interventions to limit the spread of COVID-19 in
10 Washington and maintain capacity and supplies in our healthcare system to adequately provide
11 care to people with COVID-19.

12 4. On January 21, 2020, the CDC and DOH announced what was then believed to
13 be the first confirmed case of COVID-19 in the United States in Snohomish County,
14 Washington. By late February/early March, public health officials recognized the spread of
15 COVID-19 in Washington, including an individual with COVID-19 from Snohomish County
16 who had not traveled and an outbreak in the Life Care Center, a skilled nursing facility in
17 Kirkland, associated with at least 167 cases and 35 deaths. On February 29, 2020, DOH
18 announced that a patient had died in the EvergreenHealth Medical Center in Kirkland, which
19 was then believed to be the first COVID-19 death in the United States. (In April, it was
20 determined that the first known COVID-19 death had occurred in early February in California.)
21 Since then, public health officials have worked to determine the extent of COVID-19 in
22 Washington and worked with the Office of the Governor and others to coordinate a response.

23 5. On January 30, 2020, the World Health Organization declared the COVID-19
24 outbreak a "public health emergency of international concern." On January 31, 2020, the United
25 States Health and Human Services Secretary, Alex M. Azar II, declared a public health
26 emergency.

1 6. COVID-19, a disease that can result in serious illness or death, is caused by the
2 SARS-CoV-2 virus, which is a coronavirus not identified in humans prior to December 2019
3 that spreads easily from person to person. It spreads mainly from person to person through
4 respiratory droplets produced when an infected person coughs, sneezes, or talks. A person may
5 also get COVID-19 by touching a surface or object that has the virus on it and then touching
6 their own mouth, nose, or possibly their eyes. People can spread the virus before their symptoms
7 begin (pre-symptomatic transmission) and during an asymptomatic infection which results in
8 people unknowingly spreading the virus to others. The CDC has reported two situations in
9 Singapore where pre-symptomatic transmission likely occurred in a religious setting (CDC.
10 *Morbidity and Mortality Weekly Report* 2020; 69[14]:411–415). Various studies have found that
11 the risk of transmission of SARS-CoV-2 is significantly greater in indoor settings compared to
12 outdoor settings.

13 7. Although many patients experience mild to moderate, or no symptoms, some
14 patients experience severe or critical illness requiring hospitalization and intensive care
15 treatment, such as the use of ventilators (intubation). A subset of those with severe disease will
16 die. People who are 65 years or older and people of all ages with underlying medical conditions,
17 particularly if not well controlled, are at higher risk for severe COVID-19 illness. *See* CDC,
18 *Groups at Higher Risk for Severe Illness*, [https://www.cdc.gov/coronavirus/2019-ncov/need-](https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/groups-at-higher-risk.html)
19 [extra-precautions/groups-at-higher-risk.html](https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/groups-at-higher-risk.html).

20 8. Because of the speed with which COVID-19 spreads in a community, and the
21 significant portion of COVID-19 patients who require hospitalization, intensive care, and
22 mechanical ventilation, outbreaks threaten to overwhelm the healthcare system.

23 9. There are currently no drugs or therapeutics presently approved by the U.S. Food
24 and Drug Administration (FDA) or vaccines to treat or prevent COVID-19. On May 1, 2020, the
25 FDA issued an Emergency Use Authorization for emergency use of remdesivir for the treatment
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1 of hospitalized COVID-19 patients with severe disease. An Emergency Use Authorization does
2 not constitute formal FDA approval.

3 10. On February 29, 2020, Governor Inslee proclaimed that “a State of Emergency
4 exists in all counties in the state of Washington,” and directed that emergency plans be
5 implemented. At the same time, the Governor ordered into active state service the National
6 Guard and the State Guard. In a series of proclamations issued over the following month, the
7 Governor took multiple actions to slow the spread of COVID-19, including: prohibiting
8 gatherings of 250 people or more (and, later, 50 or more); permitting gatherings of fewer than
9 50 people only if individuals complied with CDC and DOH social distancing and sanitation
10 guidelines; closing schools, colleges, and universities; prohibiting gatherings of any size in
11 “public venues,” including restaurants, gyms, private clubs, faith-based organizations, and any
12 “other similar venues.”

13 11. These actions were essential to mitigating the spread of COVID-19 and easing
14 the strain on our healthcare system. Because COVID-19 spreads from person to person through
15 close contact, maintaining distance between people and avoiding large gatherings, particularly
16 indoors, is critical. If people consistently retain a distance of at least six feet from each other, the
17 risk of the virus spreading from an infected person to an uninfected person is very low. That
18 reduces the overall spread and number of persons infected within a geographic area and persons
19 requiring hospitalization, which in turn reduces the number of intensive-care beds and ventilators
20 needed to treat patients.

21 12. Without efforts to stop person-to-person transmission, modeling studies have
22 shown that unmitigated spread of COVID-19 would lead to an explosion of cases, many more
23 hospitalizations and fatalities, and an untenable burden on the healthcare system. This potentially
24 includes deaths of patients who could potentially recover but for the unavailability of ventilators
25 and other medical care due to the strain on the healthcare system.
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1 13. For that reason, significant preventative steps were medically and scientifically
2 necessary in order to stem the outbreak in Washington. The Governor has issued numerous
3 proclamations since his initial emergency proclamation on February 29, 2020. Throughout this
4 process, I have worked in tandem with the Governor's Office, other DOH officials, and public
5 health experts to ensure the state's mitigation strategies are based on the latest and most accurate
6 data and accepted scientific practice. Despite the state's early and aggressive mitigation efforts,
7 the virus continued to spread rapidly in the first month of the outbreak: In mid-March,
8 Washington had the highest absolute number and had among the highest number per capita of
9 COVID-19 cases of any state in the country. The effective reproductive rate (R_e) during the first
10 half of March—that is, the number of new infections estimated to stem from a single case—was
11 estimated in the 2 to 3.5 range. By late March, 400 to 500 new COVID-19 cases were being
12 reported each day. From a public health standpoint, that transmission rate was unsustainable.

13 14. Thus, DOH and the Governor's Office determined that it was necessary
14 to escalate Washington's mitigation strategies. Most prominently, these include
15 Proclamation 20-25, the Governor's "Stay Home, Stay Safe" proclamation on March 23, 2020,
16 as well as subsequent modifications to that Proclamation, which generally required
17 Washingtonians not to leave their homes except for certain essential activities and essential
18 employment, and generally prohibited social, spiritual, and recreational gatherings other than
19 those attended by household members in the home. My office continues to work with the
20 Governor, Secretary of Health, and others to modify proclamations.

21 15. Without a vaccine or treatment for COVID-19, reducing person-to-person
22 transmission through community mitigation measures is the most effective way of mitigating the
23 outbreak and ensuring that the healthcare system is not overwhelmed. The "Stay Home, Stay
24 Healthy" order served this mitigation objective by imposing a clear, categorical prohibition on
25 all gatherings, private or public, for any purpose. If exceptions were made to this prohibition
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1 based on the subjective purpose of the gathering, mitigation efforts would be less successful and
 2 it would be difficult, if not impossible, for officials to enforce the proclamation.

3 16. The state's Essential Critical Infrastructure Workers list (Essential Workers list)
 4 referenced in Proclamation 20-25 established exceptions to the stay-home order based on
 5 objective criteria, including the epidemiological risk inherent in and the necessity of continued
 6 operations in light of public health, economic, national security, and other governmental
 7 objectives. The essential activities and essential business services allowed under the
 8 Proclamation did not present comparable health risks to the "public and private gatherings and
 9 multi-person activities for social, spiritual, and recreational purposes, regardless of the number
 10 of people involved" that the Proclamation prohibits. They did not present a comparable health
 11 risk because face-to-face interactions—those most likely to result in transmission—with workers
 12 at a grocery store or pharmacy are generally much shorter in duration than face-to-face
 13 interactions during social, spiritual or recreational events.

14 17. Throughout the outbreak, DOH has collected, and updated daily, statistical
 15 information concerning the outbreak. Data are available online at: [https://www.doh.wa.gov/](https://www.doh.wa.gov/Emergencies/Coronavirus)
 16 [Emergencies/Coronavirus](https://www.doh.wa.gov/Emergencies/Coronavirus). Six weeks after the Stay Home, Stay Healthy order was announced,
 17 the data indicated that Washington had made progress in slowing the spread of COVID-19.
 18 COVID-19 activity, as measures by the number of new COVID-19 hospitalizations, peaked in
 19 late March then declined steadily throughout April. Although the daily number of COVID-19
 20 confirmed hospitalizations declined while the Stay Home – Stay Healthy Order was in effect, as
 21 of May 3, 2020, data demonstrated that about 200 new confirmed cases continue to arise daily.
 22 In addition, for every confirmed case detected, there are an estimated 3 to 19 infected people that
 23 are not detected. For those reasons, the Governor extended the stay-home order on May 4, 2020
 24 until May 31, 2020.

25 18. In my professional opinion, the steps taken to date to control COVID-19 have
 26 successfully mitigated morbidity and mortality from COVID-19 in Washington State and

1 prevented our healthcare system from becoming overwhelmed. Although the stay-home order is
2 unprecedented, based on the epidemiological and public health data I have reviewed, I do not
3 believe less stringent measures would have slowed the rate of transmission as effectively as the
4 stay-home order. Restricting gatherings, including small gatherings with people outside one's
5 household, was an important part of the stay-home order because people tend to talk face-to-face
6 for prolonged periods of time when they gather.

7 19. In early May, Governor Inslee announced the *Safe Start Washington* phased
8 reopening plan—a process for careful, gradual, and science-based relaxation of mitigation
9 measures across the state. The plan sets forth four phases across which mitigation measures are
10 successively eased and is guided by a range of important public health metrics, including
11 COVID-19 cases and hospitalizations; disease modeling; testing capacity and availability; case
12 and contact investigation capacity; and health care system readiness. This approach reduces the
13 risk of COVID-19 to Washington's most vulnerable populations and preserves capacity in our
14 health care system, while safely opening up businesses and resuming gatherings, travel, shopping
15 and recreation. The plan allows counties and DOH to holistically review COVID-19 activity and
16 the ability for the county to respond when determining if a county is ready to move into a new
17 phase. During the month of May, only counties with populations below 75,000 people and
18 without a new reported COVID-19 case in the prior three consecutive weeks were eligible to
19 apply to DOH for a variance to move to Phase 2. Starting May 19, 2020, counties with a rate of
20 <10 newly diagnosed cases per 100,000 population during the prior two weeks were eligible to
21 apply for a variance. Between May 4 and June 1, DOH approved 27 counties' applications to
22 move to Phase 2: Adams, Asotin, Clallam, Columbia, Cowlitz, Ferry, Garfield, Grant, Grays
23 Harbor, Island, Jefferson, Kitsap, Kittitas, Klickitat, Lewis, Lincoln, Mason, Pacific, Pend
24 Orielle, San Juan, Skamania, Spokane, Stevens, Thurston, Wahkiakum, Walla Walla, and
25 Whitman.
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20. Effective June 1, 2020, any county became eligible to apply for Phase 2, regardless of size, provided its local health officer, board of health, and county executive or county commission supports the application. Each application is assessed in a holistic fashion by the Secretary of Health, based on a variety of key metrics reflecting the epidemiologic risk of the county's advancement to the next phase. Those metrics include the following:

- a. COVID-19 activity: The ideal target for new cases will be 25 or fewer per 100,000 residents over a 14-day period. Hospitalizations for COVID must be flat or decreasing.
- b. Healthcare system readiness: The percentage of licensed beds with patients in a given jurisdiction would preferably be less than 80% and the percentage of licensed beds with confirmed or suspected COVID-19 patients would preferably be less than 10%.
- c. Testing: Counties need to show they have adequate testing capacity, 50 times as many people tested per day as they have confirmed new cases per day – which equates to positive test results under 2%. They also need to show rapid testing of patients, ensuring that we can work effectively to contain the virus.
- d. Case and contact investigations: The goal is to contact 90% of cases by phone or in person within 24 hours of receipt of a positive lab test result. There is also a goal of reaching all that person's contacts within 48 hours of a positive test result.
- e. Protecting high-risk populations: The ideal number of outbreaks reported by week (defined as two or more non-household cases where transmission occurred at work, in congregate living, or in an institutional setting) is zero for counties under 75,000, and no higher than three for our largest counties.

21. Between June 2 and June 11, 2020, 6 additional counties were approved for Phase 2: Clark, Okanogan, Pierce, Skagit, Snohomish, and Whatcom. Between June 2 and June 11,

2020, 9 counties were approved for Phase 3: Columbia, Ferry, Garfield, Lincoln, Pend Oreille, Stevens, Wahkiakum, Whitman, and Asotin. Between June 1 and June 11, 2020, three counties were approved for a modified version of Phase 1 (sometimes referred to as “Phase 1.5” or “Phase 1.75”): King, Chelan, and Douglas counties.

22. Notwithstanding the progress we have made in mitigating the spread of COVID-19 in Washington, an emergency continues to exist for the entire state. As described above, COVID-19 can be (1) difficult to detect, (2) easily transmitted, and (3) lethal. More than 24,000 Washington residents have contracted COVID-19 and over 1,100 Washington residents have died since the pandemic began a few short months ago. In some parts of Eastern Washington, COVID-19 activity is increasing rather than decreasing, including in the counties of Benton, Franklin, Spokane and Yakima. While Washington has passed an initial peak of COVID-19 cases, our progress is mostly attributable to the extensive, statewide mitigation measures—above all, the Governor’s Stay Home – Stay Health order—the state implemented. As more and more counties progress to Phase 2 and Phase 3, however, social distancing will decline and mobility across the state will increase, and neither geographic nor political boundaries prevent the spread of COVID-19. Recall that at the beginning of the COVID-19 outbreak in February, transmission was concentrated primarily in King and Snohomish Counties. Within just a matter of weeks, the virus had moved across the whole state and, by April, all but one county in the state had confirmed at least one case. While mitigation efforts in Washington State have helped reduce the spread of COVID-19, cases will rebound and hospitals could become overwhelmed with COVID-19 patients if we do not continue to practice social distancing, so a statewide public health emergency still exists.

23. I believe that the efficacy of Washington’s mitigation efforts thus far has been achieved through the coordinated, statewide public health emergency response directed by the Governor and the Secretary of Health. This illustrates that widespread public health emergencies are best managed through the current process of centralized decision-making guided by close

1 cooperation and consultation with local public health authorities. This current process allows a
 2 bird's eye view of statewide data to drive decisions; consistent and science-based mitigation
 3 measures and public messaging; coordinated and efficient distribution of health care resources
 4 (including personal protective equipment (PPE) that is centrally purchased by the state from
 5 private vendors and resources received by the federal government); and a clear hierarchy to
 6 resolve competing interests. Importantly, the current process also takes into account county-
 7 specific concerns and provides for re-opening plans and processes tailored to local conditions
 8 and constraints. Decentralizing management of the public health emergency would sacrifice the
 9 advantages just described. Washington has 35 local health jurisdictions. Throughout the
 10 pandemic, nearly all local health jurisdiction administrators have fully supported a centralized
 11 response effort. Each of the counties and their local elected leaders could have their own unique
 12 concerns, interests, and approach. Yet because these local jurisdictions are not hermetically
 13 sealed from one another—for example, COVID-19 patients can expose people or get
 14 hospitalized in counties outside their counties of residence—each county's response will likely
 15 have an impact beyond its borders. And, to the extent one county's interests conflict with
 16 another's interests, decentralized decision-making leaves no efficient or clear mechanism for
 17 resolving those conflicts. For those reasons (and others), I would not advocate for devolving
 18 policy authority to local jurisdictions during any widespread public health crisis, let alone during
 19 the worst pandemic in a century.


20 24. Finally, I will address the statements made in certain media and by various public
 21 officials to the effect that COVID-19 is equivalent to influenza. While they both cause
 22 respiratory illness and an influenza pandemic could be similar to the COVID-19 pandemic,
 23 SARS-CoV-2 is a coronavirus and biologically distinct from an influenza virus. The viruses bind
 24 to different receptors in the human body and result in different pathophysiologic processes. The
 25 human population appears to have little to no preexisting immunity to SARS-CoV-2—unlike
 26 some past influenza pandemics such as the 2009 H1N1 flu pandemic when prior immunity likely

protected a segment of the population. The incubation period for SARS-CoV-2 is longer (average of 5 days, with a range of 2 to 14 days) than for most influenza viruses (average of 2 days, with a range of 1 to 5 days). The infectious period for COVID-19 starts at least 2 days prior to symptom onset (compared to one day for influenza) resulting in at least 1 additional day of infectiousness before a person knows they are sick. One study found that, for SARS-CoV-2, viral load was highest at the time of symptom onset, suggesting that viral shedding may peak on or before symptom onset—and thus making presymptomatic transmission more likely. By comparison, for the H1N1 pandemic influenza A virus, viral shedding peaks the first 1 to 2 days after symptom onset. Lastly, we know much less about novel coronavirus viruses than novel influenza viruses, which have infected humans several times over the past couple decades.

25. Disease transmissibility of a virus can be quantified by its basic reproductive number, or R_0 (pronounced R naught). The R_0 is the average number of new infections that result from a single infected person in a wholly susceptible population. The R_0 can vary not only based on characteristics of a virus but also with the contact rate between people, including physical distancing strategies and other mitigation measures. Unmitigated, the R_0 of COVID-19 initially experienced in Washington was around 2 to 3.5. This means every infected person likely spread the disease on average to 2 to 3.5 other individuals. Through mitigation efforts, the R_0 of COVID-19 in Western Washington dipped below 1 in mid-May. R_0 has recently risen above 1 in parts of Eastern Washington.

I declare under penalty of perjury under the laws of the State of Washington and the United States that the foregoing is true and correct.

SIGNED this 11th day of June 2020, at 12:15pm in Shoreline, Washington.


 KATHY LOFY, MD
 State Health Officer and Chief Science Officer
 Washington State Department of Health